TRANSACTIONS OF THE NEW YORK SURGICAL SOCIETY.

Stated Meeting, March 26, 1902.

The President, L. W. HOTCHKISS, M.D., in the Chair.

EPITHELIOMA OF THE PALATE AND TONSIL; VON LANGENBECK'S OPERATION.

DR. GEORGE E. BREWER presented a man, aged sixty-three years, referred to him for operation by Dr. James E. Newcomb, laryngologist to the Roosevelt Hospital. The patient stated that he had first noticed symptoms of an irritable throat five or six weeks before admission. The irritation consisted of pain and soreness in the roof of his mouth, more or less constant salivation, the presence of a bad taste in the mouth, and difficulty in opening the jaws. His general appearance was that of a man who had had some serious illness, although there was not the discoloration of the skin usually present in the cachexia of malignant disease. On the left half of the roof of the mouth, about the junction of the hard and soft palate, there was an irregular-shaped ulcer about as large as a silver half-dollar, extending from a point half an inch from the median line downward to and involving the tissues of the tonsil. The borders were indurated, and there was an increased sense of resistance throughout the entire region. The ulcer itself was covered with a dirty yellowish secretion, and bled easily when this was removed. One or two small glandular masses were felt in the submaxillary triangle. As the man gave no history of traumatism, and as syphilis could be easily excluded, the diagnosis of epithelioma seemed clear, and was confirmed by all who saw him.

The question of operation was discussed; the case was apparently on the border-land regarding the advisability of a palliative or radical operation. The man readily consented to any course

which seemed most advisable, and it was deemed advisable to administer an anæsthetic, and then decide as to whether the operation should consist of a thorough removal of the growth and submaxillary tissues, or simply an excision of both carotids, as advised by Dr. Dawbarn in cases of inoperable malignant disease of the face and mouth. The patient took the anæsthetic well, and an incision was made along the anterior border of the sternomastoid muscle, through which the external carotid artery was ligated, the enlarged lymphatic and submaxillary glands and the areolar tissue of the submaxillary triangle were removed. An attempt was then made to pry the jaws apart sufficiently for an attempt at removal through the mouth. This was found to be impossible, and an incision was made from the angle of the mouth downward and outward, crossing the inferior maxilla about one inch anterior to the angle, and joining the neck incision at its upper portion. All the tissues were divided down to the bone; the latter was divided with the Gigli saw, and the severed ends drawn apart, which gave an excellent exposure of the floor of the mouth and the region of the palate and tonsil. The growth was then thoroughly removed, the dissection being carried completely through the soft tissues of the palate. On removing the tonsil, the growth was found to extend inward, involving the internal pterygoid muscle near its origin. This, together with some fibres of the external pterygoid, was removed, leaving an extremely large, deep cavity, in the bottom of which the internal carotid artery could be felt. There was very little bleeding, owing to the previous ligation of the external carotid. The divided tissues along the floor of the mouth were united, the divided ramus of the jaw sutured with strong chromicized catgut, and the external wound drawn together by means of harelip pins and silkworm-gut sutures. There was only slight reaction following the operation; the temperature rose on the next day to 101° F., and from that time on steadily declined until the tenth day, when it became normal. For the first ten days the patient was fed by means of a stomach-tube, the mouth being washed out every hour while awake with peroxide of hydrogen and boric acid solution. It is now about nine weeks since the operation. He takes nourishment well and has gained considerable flesh.

DR. ROBERT H. M. DAWBARN said that the excision of the external carotids plus injection of paraffin into certain branches,

would not have added greatly to the time of the operation, and would certainly have increased the patient's chance of permanent recovery.

Dr. Dawbarn said that in the article recently published in the "International Text-Book of Surgery," upon surgery of the mouth, the author advised that, after all operations on the mouth for cancer, the patient should be allowed to sit up "as soon as possible"; with the idea that the prospect of a cure would be thereby increased. The speaker said he strongly disagreed with this view of the writer. On the contrary, he could recall at least two instances occurring in his own practice where a fatal *Schluck-pneumonie* followed excision of the tongue for cancer, from septic fluid gravitating into the larynx, the stump of the tongue being unable to control the epiglottis. In these cases, as Dr. Brewer illustrated in his patient, it is very important to keep the mouth in as aseptic a condition as possible; and also, until swallowing can occur without coughing, to maintain a position with the head slightly lower than the body, by using no pillow and elevating the foot of the bed; continuing this position for weeks, if need be,

REMOVAL OF A FOREIGN BODY LODGED BETWEEN TWO STRICTURES OF THE ŒSOPHAGUS.

Dr. Brewer also presented a patient, a male, aged thirty-one years, admitted to the Roosevelt Hospital in November last. He stated that about eight months before admission he had accidentally swallowed a quantity of lye. This produced immediately a marked irritation of the pharynx, œsophagus, and stomach, which was evidenced by severe pain and burning, nausea, vomiting, and profuse salivation. These symptoms, however, subsided, and he resumed his work. Several weeks later he noticed a progressively increasing difficulty in swallowing solid food. This became so great that he was obliged to live on fluids, until he experienced such difficulty in swallowing the latter that he applied at the Massachusetts General Hospital for relief.

An examination showed dense cicatricial strictures in the œsophagus, which would not yield to dilatation. Under anæsthesia gastrostomy was done, and the strictures divided in the usual way by sawing with heavy braided silk thread. It was found after this operation that large œsophageal sounds could be passed from below upward through the gastrostomy wound, but not from

above downward, probably owing to the presence of a diverticulum just above the lower stricture. The patient finally left the hospital and came to New York. The strictures re-contracted and he applied for further treatment at the Roosevelt Hospital.

On admission, he was found to be considerably emaciated. Nothing could be passed into the stomach from the mouth. It was decided to divide the strictures again by means of the silk ligature, and if possible to keep them open by means of bougies introduced from above. An examination of the œsophagus showed the first stricture to be located just below the cricoid. This admitted with difficulty a bulb about thirty millimetres in circumference. Another stricture of about the same caliber was found about ten inches from the teeth. A third obstruction was encountered between fifteen and sixteen inches from the teeth line, through which nothing could be passed. The patient succeeded in swallowing a fine silk thread, which was afterwards withdrawn from the gastrostomy wound by means of a bent probe. On December 4, under chloroform anæsthesia, a heavy braided silk ligature was attached to the fine thread and drawn from the mouth through the œsophagus and out at the gastrostomy wound. After thoroughly sawing the strictures, the condition of the œsophagus was examined by means of a bulbous œsophageal bougie of about forty-five caliber. The divided strictures offered some resistance to the passage of the bougie, and when it was withdrawn it was found that the bulb had separated from the staff, and remained in the œsophagus between the two lower strictures.

An attempt was immediately made, by inverting the patient, to extract the foreign body, or at least to bring it to a point where it could be reached by an external œsophagotomy. This proved unsuccessful. Several days later another attempt to remove it was made under chloroform anæsthesia. The strictures, which had already contracted, were again thoroughly divided by means of the silk saw, and a small cup-shaped snare, fashioned like a parachute, was passed from above downward until the foreign body was reached. When this was thoroughly engaged, strong traction succeeded in drawing the foreign body from the œsophagus into the stomach, from which it was easily removed through the gastrostomy opening. A No. 40 bougie was then passed every other day through the gastrostomy wound upward to the pharynx, and the patient instructed to take no nourishment, not even fluids,

except through the stomach wound. This was advised in the hope that the irritation produced by the foreign body, and the thorough division of the strictures might result in a shrinkage or possible obliteration of the diverticulum; which had up to this time absolutely precluded the use of the bougies from above. After ten weeks of this treatment, it was found that a No. 40 œsophageal bougie could easily be passed from the mouth to the stomach. The patient was then permitted to eat semi-solid food and partake of fluids through the mouth, and the gastrostomy wound was allowed to heal. He is now able to swallow practically any kind of food, and, although the gastrostomy wound is not entirely healed, he is rapidly improving.

DR. GEORGE WOOLSEY asked Dr. Brewer whether he thought the irritation caused by the foreign body in the œsophagus was really the important factor in the obliteration of the diverticulum. Experience had shown that cicatricial strictures of the œsophagus are not infrequently associated with diverticula of considerable size, which contract when the stricture is divided and kept open. In Dr. Brewer's case the stricture was kept open by means of the string-saw and the passage of bougies for a considerable time, which would account for the shrinkage of the diverticulum.

DR. BREWER said the œsophageal stricture in this case had been first divided at the Massachusetts General Hospital, where it was kept open for several months, but no instrument could be introduced into the stomach from above on account of the diverticulum, which evidently persisted during all this time. It was not very large, but just large enough to catch the end of the œsophageal bougie. The speaker said he had observed the same thing in other cases, and he was inclined to believe that the irritation produced by the presence of the foreign body had much to do with the closure of the diverticulum.

PERINEAL PROSTATECTOMY.

DR. BENJAMIN T. TILTON presented a patient, sixty-seven years old, who entered the Colored Hospital on December 7, 1901. Three days previous to his admission he had an attack of retention of urine which required catheterization. Previous to that he had suffered from frequent urination and inability to completely empty the bladder. On admission, the amount of his residual urine was found to be fifty ounces. His general condition being

very poor, he remained in the hospital for three weeks before an operation was undertaken. During that time he had to be catheterized twice daily. At the time of operation, his urine was clear. Rectal examination revealed a large prostate, its right lobe being much the larger.

On December 27, prostatectomy was performed through a Y-shaped incision in the perineum. Owing to the thinness of the abdominal wall, it was found very easy to push down the prostate from above the symphysis and remove the hypertrophied portion of the gland. The wound was drained for a week, and then healed rapidly without complication. Following the operation, there was a short period of incontinence. The amount of residual urine at present is about an ounce. He has no difficulty in urination, and the urine is clear.

In reply to a question as to whether the prostate was reached and its capsule opened through the Y-shaped incision without opening the urethra, and also whether the urethra was opened subsequently and drainage instituted, Dr. Tilton replied that he opened the capsule outside of the urethra and completed the operation in that way. The membranous urethra was then opened for the insertion of a drainage tube into the bladder.

RESECTION OF SIGMOID FLEXURE IN STRANGULATED HERNIA.

Dr. Tilton presented a patient, a man thirty years old, who was admitted to Bellevue Hospital during the evening of November 27, 1900. The only point of interest in his previous history was that he had a left-sided inguinal hernia since birth. On the morning of his admission to the hospital, while at stool, the hernia came down. He was unable to reduce it, and sent for his family physician, who also failed to reduce it under an anæsthetic.

An examination revealed a large tumor, eight inches in length and five inches in width, in the left inguinal region. There was no impulse. On opening the sac, it was found to contain a large part of the sigmoid flexure. After freeing it, it was irrigated for several minutes with hot salt solution; but as its color did not improve, it was decided to leave this portion of the intestine outside of the abdominal wound, in order to give it an opportunity to regain its vitality. Twelve hours later it was evident that necrosis of the gut was inevitable and that resection was necessary. Ten

inches of the gut—practically the whole of the sigmoid flexure—was excised, and its two ends brought together by a large-sized Murphy button, end-to-end suture being impossible owing to the shortness of the lower segment. The patient was much shocked by the second operation, but finally reacted. At the end of six days he developed a fæcal fistula, through which the Murphy button was subsequently discharged. When the patient left the hospital, three months after the operation, his wound had entirely closed. Since then he has developed a hernial protrusion at the site of the operation.

FOCAL EPILEPSY; OPERATION WITH USE OF A SPECIALLY PREPARED CELLULOID PLATE.

DR. ROBERT H. M. DAWBARN presented a man, about forty years old, who was admitted to the Neurological Division of the City Hospital last April, and subsequently, early in June, transferred to the Surgical side. According to the history he gave, he had suffered from epileptic seizures for the past seven years. The convulsions occurred two or three times weekly,—sometimes at night, sometimes during the day,—and they always began in the fingers and hand of the left side, thence quickly spreading up to the face, and then he would drop unconscious.

Examination over the region of the left hand centre (right side of head) showed a distinct bony depression, just admitting the tip of the index-finger, and about one centimetre in depth; although there was no scar. On the opposite side of the head there was a narrow white scar extending backward about eight centimetres from the forehead, but no depression. These lesions were evidently not congenital, and, although the patient denied that he had ever met with an accident, the probabilities were that his memory had become weakened as the result of his epilepsy.

The latter part of June, 1901, the patient was operated on as follows: The entire scalp having been shaved, a flap of bone was removed over the left hand centre. The depressed portion of the bone was firmly adherent to the dura, and this to the pia, and the brain subjacent was a little depressed. It was thought best to remove the flap entirely. Then, with a sterilized faradic electrode, the naked copper wire, using a very weak current, the hand centre was localized, and after turning down the dura mater a section of gray matter a little smaller than a silver half-dollar

was excised throughout its entire thickness, down to the white substance. The dura mater was then closed with finest chromic catgut stitches, and the large opening in the skull was covered by a plate of specially prepared celluloid. Primary union followed. The plate has given the patient no discomfort, and since the operation he has had only two very slight convulsions, one in October and the other in December. Present examination of the patient shows the plate to be firm and rigid still.

Dr. Dawbarn showed a sample of the celluloid which he had employed in this case. It has the appearance and thickness of ordinary window glass. Celluloid, as it is usually manufactured, has been objected to by surgeons on the ground that the nitric acid which it contains is apt to prove irritating to the tissues, and, furthermore, that it has been known to be rapidly absorbed. At the St. Paul meeting of the American Medical Association in the surgical section, there was reported a case where a celluloid plate in the skull softened and yielded within a very few weeks. In this specially prepared celluloid, Dr. Dawbarn said, he had the nitric acid thoroughly washed out, and instead of using camphor for purposes of elasticity, synthetical urea was substituted. The latter is apt to be less irritating than the former. After a piece of this celluloid is immersed for a time in boiling water, it can be whittled as readily as pine wood, and bent to any desired shape so as to fit the skull. Being transparent, when placed over the opening it can be scratched exactly of the right size, and then rapidly whittled down to the line so demarcated. In the case reported, the speaker said, the aperture in the skull was somewhat less in size than a man's palm.

The strength of the hand on the affected side was greatly impaired by the operation, but it is gradually improving. The man is not taking any bromide, and will not receive any until the effects of the operation are clearly established.

Dr. Brewer said that he thought the question of cortical excision would probably receive more attention in the future than it has in the past. In one case where he resorted to it, the result was very successful. The total number of cases in which this has been done is still so limited that no positive conclusions can be drawn.

Dr. Charles L. Gibson said the immediate results after operation for focal epilepsy have been, as a rule, very encouraging, and in a number of cases reported there has been a cessation or

diminution of the attacks for some months, but we are still awaiting the reports as to the late results. Kocher attributed the early benefits of the operation to the relief of the pressure.

DR. BREWER said that in his case the immediate result of the operation was very disastrous. Instead of having three convulsions a day, as he did previous to the operation, his patient had one about every fifteen minutes. After at least six months had elapsed, the interval between the attacks lengthened, and he sometimes went for three months with only a single attack.

DR. GEORGE WOOLSEY said that a few years ago he excised the cortex in a case of epilepsy accompanied by athetoid movements of the left hand. The operation was followed by immediate improvement, but not an absolute cure. The improvement continued for a considerable period, but subsequently the patient partly relapsed into his former condition, though the epileptic attacks remained less frequent and less severe.

PERINEAL PROSTATECTOMY AFTER THREE UNSUCCESSFUL BOTTINI OPERATIONS.

DR. SAMUEL ALEXANDER presented a man who had already been shown by Dr. Alexander at a meeting of the Society on January 22 of the present year as an illustration of a case in which three Bottini operations on the prostate had proven unsuccessful.

On January 30, Dr. Alexander performed a median perineal prostatectomy, and removed from the left lateral lobe a mass measuring about two and one-half inches by two inches, together with a small median lobe. Two smaller masses were enucleated from the left lateral lobe. Perineal drainage was established. Tube was removed on the eighth day. On the thirteenth day patient was able to retain urine for one and a half hours and voluntarily passed four ounces. At the end of the month perineal wound had closed entirely, and patient was passing all of his urine through the urethra. At the present time he urinates twice at night. The urine still contains a small amount of pus.

On March 7 there was one and a half drachms of residual urine. On March 8 there were two drachms of residual urine. On March 9 there were thirty minims of residual urine. On March 10 there was no residual urine.

At the request of Dr. Alexander, the President appointed Drs. Brown and Johnson to examine the patient. They did so, and

reported that his bladder contained about two drachms of residual urine.

CAVERNOUS ANGIOMA OF THE FACE.

DR. F. KAMMERER presented a man, forty years old, who first came under the speaker's observation about a year ago. He was suffering from a large, cavernous angioma of the left side of the face, which had existed for about ten years. When Dr. Kammerer first saw him, there was a faint pulsation in the tumor, which disappeared on compression of the carotid. Ligature of the external carotid, therefore, seemed advisable before attempting to remove the growth. The operation proved somewhat difficult, on account of the downward extension of the angioma. Finally, however, the speaker was able to free the common carotid up to its bifurcation, and finally succeeded in passing a ligature around the external carotid, immediately at its origin. As soon as the ligature had been tightened, the growth decreased to about one-half its former size, and the pulsation immediately ceased. Excisions from the growth were made in several places, causing considerable hæmorrhage, and complete extirpation was therefore not deemed justifiable.

For about six months subsequent to this operation, the tumor remained comparatively small; but when the patient again presented himself, a month ago, it had resumed its former size. Dr. Kammerer again cut down upon the common carotid, and followed it upward; he found the external carotid obliterated, while the internal carotid had grown to about twice its normal size. Pressure upon the common carotid produced no apparent change in the size of the tumor, which proved that its blood supply came from another source. Compression of the right carotid did not apparently affect the size of the growth.

At this second operation, excisions of parts of the tumor were again practised, and the hæmorrhage was very severe. Some of the venous openings were at least one-eighth of an inch in diameter. Thus far the angioma had not involved the mucous membrane of the mouth.

DR. DAWBARN said he thought the growth received its principal blood supply from the opposite side through numerous small vessels, and it could hardly be expected that tying the external carotid on one side would exert more than an evanescent effect.

Its blood supply probably came in part from the subclavian by the vertebral branches, and from many branches of the internal maxillary anastomosing with the ophthalmic and middle meningeal and various others of the internal carotid system.

As regards further treatment in this case, Dr. Dawbarn said he would be in favor of not only extirpating the external carotids, but also of plugging the terminals of these vessels and the occipital by an injection of paraffin. It is not permissible to plug all the branches, because plugging the superior thyroid will cause permanent paralysis of the vocal cords; and plugging of the linguals will interfere with deglutition, and make the tongue as rigid as a board. If the posterior auricular artery is plugged, the ear may in part slough away. The vessels where plugging is advised are those by which, chiefly, a recurrent anastomosis is possible.

In reply to a question as to how the paraffin is used in these cases, Dr. Dawbarn said the mixture he employs consists of one part of white paraffin and nine parts of white vaseline, which is liquid above 108° F. This mixture is injected at a temperature of 120° F. About forty-five minims should be injected into the occipital just where it is given off, and the same amount up to a drachm, into the external carotid just where it disappears into the parotid gland; but more than a drachm would probably be dangerous, in the average case, from its passing beyond the internal maxillary and superficial temporal branches, and entering their free anastomoses with the internal carotid. Thus far he had used this combination of excision and paraffin injection about a half dozen times; and Dr. A. T. Bristow, of Brooklyn, a few times. No one else as yet has tried it.

After a fortnight or so for recuperation, the same operation must always be repeated upon the other external carotid. It is a complete waste of time to endeavor to accomplish anything approaching permanency of shrinkage with work upon one side only.

GANGRENOUS APPENDICITIS OBSCURED BY ENLARGEMENT OF THE LIVER.

Dr. Ellsworth Eliot, Jr., presented a woman who was admitted to the Presbyterian Hospital in May, 1900, with the following history: About ten years previous to the time of her admission she had suffered from an illness which lasted almost

five months. During that time she had complained of pain in the abdomen, and the probable diagnosis was that she had an "abdominal abscess," although no operation was done.

When she entered the hospital, she had pain in the epigastric region, and there was some nausea and vomiting. Her temperature was 101° F.; pulse, 124; respirations, 32. In appearance she was apathetic. An examination of the abdomen showed some tumefaction in the right hypogastrium, and a mass could be made out extending from above the free border of the ribs down to the umbilicus. It was not distinctly movable, and was markedly tender along its lower margin. There was considerable rigidity and distention of the abdominal wall, most marked on the right side, but also noticeable on the left.

An exploratory operation being deemed advisable, a vertical incision was made over this globular mass. When the peritoneum was opened, the mass proved to be an enlargement of the liver. The incision was thereupon prolonged downward, and the gall-bladder exposed. This was found to be perfectly normal. The colon was then drawn upward through the wound, and an examination of the appendix showed that organ to be in a gangrenous condition. It was removed; the upper part of the wound was sutured in the ordinary way, and the lower part was left open to heal by granulation. The patient made an uneventful recovery, and was discharged from the hospital at the end of five weeks. The enlargement of the liver, which proved to be nothing more than a hypertrophied right lobe, still exists without apparent change.

Stated Meeting, April 9, 1902.

The President, L. W. HOTCHKISS, M.D., in the Chair.

PERFORATIVE CHOLECYSTITIS.

DR. F. TILDEN BROWN presented a man whom, on September 19, 1901, he had first seen while a patient in the medical side of the Presbyterian Hospital, where he had been for nine days. The following history was given: He had been found in his home by

the ambulance surgeon acutely delirious. On reaching the hospital, temperature was 103° F.; pulse, 120; respirations, 44. Heart action very poor, perspiring profusely, and surface very cold.

Present illness began about two weeks before, with severe frontal headache and great irritability. One week later began to have abdominal pain in the right upper quadrant. He became very feverish, and has so remained until the present time. No nausea or vomiting; bowels moved one to three times a day; said to have passed large quantities of dark-colored urine. Two days before admission patient began to talk disconnectedly and gradually became delirious. No convulsion; no cough, but rapid breathing. Abdominal pain, earlier very severe, had lessened in last few days. He had had one chill the day before admission. Habits, mildly alcoholic.

The patient was a very corpulent man, well nourished. Tongue rather dry, slightly coated to whitish fur. Spleen not made out. Urine, brownish red, 1020 acid, heavy brown sediment. Granular and hyaline casts in great abundance. Ten per cent. albumen.

The abdomen was prominent; distention very marked, tympanitic to percussion; that on right side being of duller variety. Rigidity of muscles of right side. Apparently some tenderness over liver region, where dulness began at third space, becoming flat at fourth rib, continuing to five inches below the costal margin in parasternal line.

Two days later the abdomen was less distended. No longer has pain; still generally tympanitic. There is dulness in the right flank, not shifting; no fluid wave obtained.

Two days later, September 16.—There was an undefined sense of a mass extending as far to the side as the anterior axillary line. All trace of albumen has disappeared from urine.

September 19.—Abdomen less distended. Mass still felt. Widal tests have been negative. Leucocytosis has ranged between 19,000 and 48,000.

Dr. Brown diagnosed cholecystitis, but because of the extreme lateral position of the tumor, had the possibility of abscess in mind. Under gas and ether a six-inch vertical incision was made over the most prominent part of tumor, *i. e.*, downward from tip of tenth rib. As the peritoneum was opened, a large

quantity, estimated at a quart, of stinking pus and blood gushed out. This was found to come from a walled-off peritoneal cavity of very irregular surface. Some pockets eight or nine inches from the surface. The half hand introduced could not touch the bottom, but sponge forceps found there a single loose calculus of pigeon-egg size. Looked at hastily, it was thought to have no facets. What was believed to be the outer surface of the gall-bladder could be traced for a short distance above. Search for an opening in it from which the stone was believed to have escaped was futile. A long irrigating curette was used cautiously to cleanse the various pockets of muco-pus and blood. Cavity drained with large tube and partly packed with gauze; wound partly closed with chromic gut.

Culture from the abscess. Large non-pathogenic bacilli.

Except for a profuse bloody discharge from wound on third day, perfect convalescence, and left hospital twenty-six days after operation, with a small sinus discharging mucus.

Later examination of the calculus when cleansed of mucus showed slight facets at one extremity. Had this been noted at time of operation, the gall-bladder and cystic duct would have received more searching attention.

MORRISON'S OPERATION FOR CIRRHOTIC ASCITES.

DR. BROWN presented a man, forty-six years of age, who for two years after Morrison's operation had been recovered from an ascites due to cirrhosis of the liver. For the detailed history of the case, with general remarks upon the operation, see page 191.

DR. GEORGE E. BREWER said that as this patient had remained in good health for over two and one-half years since he was operated on by Dr. Brown, he demonstrated very conclusively that certain cases of ascites due to cirrhosis of the liver can be cured by this operation. Dr. Brewer said he had recently collected fifty-one cases that have been published, and of these there have been six absolutely cured of their ascites and remaining well after two years. Six others have been cured of their ascites and were perfectly well when they were last seen, which was less than two years after the operation. In a communication received from Dr. Osler he stated that he had seen several successful cases. In view of these facts, Dr. Brewer said, the operation was certainly justifi-

able. White, of London, has shown that the average duration of life of patients suffering from cirrhosis of the liver, with ascites, in uncomplicated cases, is only about eight or nine weeks after the first tapping.

EXTIRPATION OF RETROPERITONEAL TUBERCULOUS GLANDS.

DR. WILLY MEYER presented a woman, thirty-five years old, who was operated on three times at the Strasburg Clinic for tuberculous glands,—twice in the neck, and once in the left inguinal region. She came to the German Hospital last summer suffering from tuberculous glands in the right inguinal region, which gave her a great deal of pain. For the purpose of removing these, Dr. Meyer operated on July 27, 1901. Upon carefully stripping the peritoneum from the diseased glands, it was found that the inflammatory process extended backward to the retroperitoneal region. Not having permission for a more serious operation, only the glands in the groin were removed as thoroughly as possible, and in the course of time the patient was discharged from the hospital. Subsequently she returned, complaining of a good deal of pain along the right crural nerve, and insisting upon another operation. This was done on December 11 last. The usual incision for ligating the external iliac artery was made, and in order to get sufficient space, the inner half of the former incision was again opened. After exposing the field of operation, the ureter was pulled aside, and by careful dissection Dr. Meyer was able to remove the enlarged glands from the side of the vein. No vessel was injured. Layer sutures were applied and the wound closed with gauze and tube drainage. In any other region, Dr. Meyer said, he would have disinfected such a wound with iodoform, but he refrained from using it here because of the danger of iodoform poisoning. On account of the recumbent position of the patient, the wound did not drain well, and he found it necessary to make a counter-opening (intermuscular) above. The subsequent course of the case was uneventful.

Dr. Meyer called attention to the fact that in these cases the affected retroperitoneal glands are usually located below the common iliac artery, very rarely above.

PROSTATIC HYPERTROPHY CURED BY BOTTINI'S OPERATION.

DR. WILLY MEYER presented a man fifty-two years old, who in August, 1896, after ingestion of a great deal of ice-cold liquid, had first experienced trouble in micturition. A physician advised sounding and irrigation of the bladder. Infection followed, also inflammation of the right testicle. There was a call for micturition every half-hour to one hour day and night. At one of our public hospitals vesical irrigation was carefully carried out for many weeks. In December the right testicle was removed. After the operation the patient was somewhat improved. The frequency in micturition decreased and the urine cleared up. But in April, 1897, recurrence of the former symptoms with considerable pain in the suprapubic region set in. Urination occurred about every forty-five minutes; dysuria was present. Little improvement followed, though the bladder was continually washed for a whole year.

When Dr. Meyer first saw the patient on April 28, he urinated every fifteen to thirty minutes in the daytime; nights every hour to an hour and a half. With some effort he passed 150 cubic centimetres; residual urine, 175 cubic centimetres. The catheter, left within the bladder, after the latter had been thoroughly irrigated until the water returned clear, soon gave exit to a small amount of turbid urine. There surely existed pyelitis. The prostate on rectal palpation was found to be equally enlarged in both lateral lobes, and sensitive. Its upper border could be reached. As a result of urinary analysis a diagnosis was made of secondary hyperæmia of the renal parenchyma or more marked lesion; chronic cystitis without alkaline fermentation. Cystoscopy showed a large prostate, trabecular bladder; probably pyelitis on the left side, as the urine expelled from the left ureteral opening appeared cloudy.

May 7, 1898, Bottini's operation was performed at the German Hospital.

The first two days following the operation the patient felt very much benefited. Whereas he had had to get up during the night every hour to an hour and a half to urinate, and that always with pain, micturition now was at once rendered easy. Thus the report of the night from the 18th to the 19th of May was: The patient voided urine voluntarily between 10 and 11 P.M.; next

between 3 and 4 A.M.; and next at 6 A.M. Using the patient's own words, he "certainly passed the best night for the last twenty months." On the third day the traumatic irritation of the gland began to produce greater frequency of micturition; then incontinence appeared for a short time, most prominent during sleep. There was no vesical irrigation; urotropine was administered internally. A short time after the operation the patient left the hospital. He had no further local treatment. On June 15 he reported that he was urinating every hour and a half to two hours during the day, but he could wait longer if he wished; during the nights, he waits about three to four hours; at times he has to strain rather long before the bladder is completely emptied. The former pain has disappeared. He feels and looks better, and has gained in weight.

Dr. Meyer said the history of this case was included in a paper on this subject which he read before the New York Academy of Medicine in November, 1898. The patient was subsequently lost sight of and did not present himself again until very recently. Since then, Dr. Meyer said, he had not yet had an opportunity of examining the patient's bladder for residual urine, but he would do so, and report the result at a future meeting.

The patient complains of no symptoms referable to the prostate at present, and he is able, without the slightest hesitation, to pass a full stream of perfectly clear urine.

CHOLELITHIASIS.

DR. ALEXANDER B. JOHNSON presented three cases of cholelithiasis.

CASE I.—R. R., aged forty-three years, was admitted to the New York Hospital, March 19, 1902, with a history of repeated severe attacks of pain referred to right hypochondrium, associated with chills, fever, bile-stained urine, clay-colored stools, vomiting, and other symptoms of biliary obstruction during the past thirteen years. From time to time, also, numerous small biliary calculi have been passed per rectum.

For the past two months the pain and constitutional disturbance from which the patient has suffered have been on the increase; jaundice, if present, has been slight during this time.

Present Condition.—Patient is fairly nourished. Temperature and pulse normal. Slight jaundice. Constipation. Urine, a small

amount of bile. Abdominal wall lax. Liver easily palpable two inches below free border of ribs. Gall-bladder not felt.

Operation, March 21.—Gas and ether narcosis; incision four inches long at anterior border of right rectus muscle. Liver pushed upward; beneath it a distended gall-bladder completely filled with large and small stones. Palpation of common duct negative. Subperitoneal extirpation of gall-bladder. Cystic duct explored, no stones found therein. Cauterization and ligature of stump of cystic duct. Suture of peritoneal folds formerly enclosing gall-bladder. Rubber tube and gauze-wick drainage. Suture of abdominal wound. Aseptic healing. Bile-stained stool on second day. Cessation of pain at once, and normal convalescence. The gall-bladder contained two very large and numerous small calculi.

CASE II.—E. M., aged twenty-two years, was admitted to the New York Hospital, March 18, 1902. Two months ago this patient began to have attacks of cramp-like pain in the right hypochondrium radiating to the shoulder and back, accompanied by chilly sensations, fever, and vomiting, but no jaundice. These attacks have been repeated every few days since. They have lasted from twenty-four to forty-eight hours, and have confined the patient to bed. Four days before admission to the hospital, an attack set in, and the patient noticed twenty-four hours later that she was jaundiced, and that her urine was very high-colored. Stools not noted. Bowels regular. The pain has shifted to the epigastrium in the median line.

On admission, the patient is well nourished and in good general condition. She is markedly jaundiced. The abdomen is flat. There is tenderness on deep pressure in the right hypochondrium and in the epigastrium. The liver does not appear to be enlarged. The gall-bladder could not be distinctly felt. The urine contains much bile. The stools are clay colored. Temperature, 100° F.; pulse, 106; leucocytes, 10,000.

The following morning the patient was put under gas and ether. A vertical incision was made along the outer border of the right rectus muscle three and a half inches long, beginning above at the free border of the ribs. The gall-bladder was found distended. Palpation of the common duct between a finger introduced into the foramen of Winslow and the thumb detected a small hard mass low down in the common duct.

With some difficulty this portion of the duct was brought into view, and a small incision over the hard body permitted the extraction of a spherical calculus about the size of a pea. The removal of the calculus permitted the escape of a considerable quantity of bile-stained mucus. The gall-bladder then collapsed.

The cut in the common duct was sutured imperfectly with fine catgut. The exposed viscera were cleansed with salt solution and dried. Closure of the wound in the abdominal wall. Drainage with a rubber tube and a strand of gauze down to the hole in the common duct.

There was no rise of temperature following the operation nor any disturbance of wound healing. A large movement of the bowels, containing abundant bile, on the second day. Drainage removed on the third day. Stitches removed on the eighth day. The jaundice had notably diminished after three days, and had entirely disappeared after ten days. The patient was allowed to sit up on the twentieth day. Urine and stools normal.

CASE III.—H. H., forty-six years of age, was admitted to the New York Hospital, February 13, 1902. During the past eight years she has suffered from numerous severe attacks of pain in the region of the gall-bladder. The attacks lasted for several days, and were often followed by jaundice. During the past four years the attacks have recurred every two months or so. During the past three months the patient has had severe attacks of biliary colic, and the jaundice has been constant, with remissions. The last attack began four days before admission to the hospital. The pain lasted two days and a half, accompanied by a chill followed by fever.

At the present time the patient is well nourished; she is deeply jaundiced. The abdomen is soft. The liver extends an inch below the free border of the ribs in the nipple line. There is tenderness in the region of the gall-bladder upon deep pressure. The urine and the stools are characteristic of biliary obstruction. The coagulation of the blood is notably delayed.

February 14, under gas and ether anæsthesia, a three-inch vertical cut was made at the outer border of the right rectus beginning above, an inch below the free border of the ribs. The gall-bladder was found rather deeply placed beneath the liver. Moderately distended. Palpation detected a stone of considerable size in the gall-bladder. Palpation with the finger introduced into

the foramen of Winslow detected two large stones in the common duct. Gall-bladder opened, permitting the escape of bile-stained mucus. A single stone, measuring three-quarters of an inch in its greatest diameter, was abstracted by means of a scoop. Efforts to move the stones in the common duct upward into the gall-bladder were not successful. An incision of the common duct behind the duodenum, permitting extraction of two stones of about the same size as the first. Suture of the common duct and the gall-bladder with fine silk. Cavity cleansed with salt solution. Closure of the wound except for a small rubber drainage tube and a strand of gauze which were introduced down to the wound of the common duct. Sterile dressing.

There was a slight escape of bile into the dressing for about forty-eight hours; after that time, none. The tube was removed on the third day, after which a small gauze wick was inserted a short distance for several days longer.

The movements from the bowels contained bile on the third day. The wound healing was aseptic, producing a linear scar. The disturbances of pulse and temperature during convalescence were unimportant. The patient left the hospital on the twenty-fifth day well.

DR. JOHNSON, in reply to a question as to whether the gall-bladder should be left open or closed, said that when the interior of the organ was in an infected condition, it would be desirable to drain it. In the third case reported by him the condition of the gall-bladder seemed to be quite aseptic, and there were apparently no indications for leaving it open.

DR. MEYER said that in one of his cases of so-called ideal cholecystotomy he was able to close the gall-bladder at once. The contents were apparently aseptic, and immediate closure seemed to be the proper thing to do. It did not give rise to the slightest disturbance.

RUPTURE OF THE SPLEEN.

DR. GEORGE EMERSON BREWER presented a boy, aged fourteen years, who was admitted to the First Surgical Division of Roosevelt Hospital on May 31, 1901, suffering from pain in the epigastric region. He stated that the day before, while riding his bicycle he was thrown violently over the handle-bar, severely contusing the abdomen by striking a rock. The pain at first was

severe, and he vomited a small quantity of fluid material. After a few moments, however, he was able to rise, and walked to his home, a distance of more than a mile. The pain continued; he was placed in bed, and after a few hours expressed himself as being more comfortable. The following morning as the pain seemed more severe and the abdomen was markedly tender to the touch, he presented himself at the hospital for admission.

On examination his temperature was found to be 103° F.; pulse, 132; respirations, 36. The face was pale, the extremities cold. There was great tenderness over the upper portion of the abdomen, most marked in the epigastric and left hypochondriac regions. There was muscular rigidity over the entire abdomen, although more marked in the upper third. No dulness was made out in the flanks.

As the pulse seemed extremely weak and thready, he was immediately prepared for operation. Under chloroform anæsthesia an incision three inches in length was made in the median line just above the umbilicus. As soon as the peritoneum was opened, there was a gush of dark-colored blood from the wound. Exploration with the hand showed that there was a very large amount of blood in the peritoneal cavity. The incision was at once extended both upward and downward, reaching from the ensiform to the pubis. As soon as the abdominal cavity was opened, the anæsthetist reported that the boy was pulseless. He was given immediately hypodermic stimulation and an intravenous infusion of 1500 cubic centimetres of normal salt solution. While this was going on, a careful exploration of the abdominal viscera was made, which revealed the presence of a large rent in the external surface of the spleen almost dividing the organ into two halves. The hæmorrhage was violent, and was only controlled by stuffing the wound full of gauze and pressing it securely against the diaphragm.

After arresting the hæmorrhage in this manner, the patient was completely eviscerated and large quantities of clotted blood removed from the flanks and the pelvic cavity. The intestines were cleansed with large quantities of salt solution, replaced in the abdomen, and the incision united by means of through and through sutures of silkworm gut. A small cigarette drain from the pelvic cavity emerged at the lower angle of the wound, while the large gauze packing was brought out at the upper angle. The

patient was sent to the ward in an extremely critical condition, and was immediately given a hot coffee enema and hypodermic injections of strychnine, whiskey, and digitalis. He rallied somewhat, and in the evening the temperature had dropped to 99.4° F., pulse 128, and slightly improved in quality. The patient vomited considerably during the night and the following day, and no attempt was made to nourish him. During the second night his condition grew worse in spite of the most vigorous stimulation, and on the following morning his temperature was 104.5° F., pulse between 150 and 160. The abdomen was distended, and there was constant vomiting of small quantities of dark-colored foul-smelling fluid. The face was extremely pale, was bathed in cold perspiration, and he seemed to be dying. At the earnest request of his mother, but with little or no hope of improving his condition, he was again taken to the operating-room and given a large intravenous infusion. This so improved the quality of his pulse that they were able to give him a few whiffs of chloroform and reopen the wound. As the intestines were injected and in places covered with lymph, the entire abdominal cavity was washed out with a very large volume of salt solution. A counter-opening was made in the left flank, through which the end of the gauze which plugged the splenic wound was passed. The median incision was again united, leaving a fresh cigarette drain in the pelvic cavity.

After his removal to the ward, he was vigorously stimulated, but lay in a condition of extreme shock for many hours. The following day he seemed somewhat better. The bowels moved, the vomiting stopped, and he took a small amount of nourishment. With the exception of two or three sharp rises of temperature, his condition continued to improve. At the end of seven or eight days the gauze packing was removed from the wound in the flank and replaced by a small wick of sterile gauze. From this time on the history is uneventful. He made a complete recovery, and was discharged from the hospital on July 7.

DR. BROWN said the expedient resorted to by Dr. Brewer to control hæmorrhage in his case may prove of great value to others under similar circumstances, or even where the patient could probably tolerate a splenectomy. He asked Dr. Brewer whether, in such a case, he would again resort to the method of plugging the splenic wound, or some modification of it, and also whether,

at the time of operating, he would make a dorsal incision for the subsequent removal of the gauze.

Dr. Brown said he had done splenectomy in three cases of rupture of the organ, all resulting fatally. In two of these cases the rupture resulted from a comparatively trivial injury. One of the patients was a man, who, while standing on a chair, tipped over and fell on the floor. The second case occurred in an iceman, who, while lifting ice from the wagon, was punched in the ribs by the driver. In the third case, the exact circumstances were forgotten, but the injury resulted from quite a serious fall. In one of the cases the operation was done eight or nine hours after receipt of the injury; in the others it was not permitted by relatives until a greater lapse of time, and when very serious symptoms had supervened. In two of the cases the pedicle of the spleen was compressed between the fingers while an elastic ligature, spread and held taut on a large grooved tunnelled sound, was passed around it. It was noticed that the compression with the fingers controlled the bleeding very effectually, but other methods proved less successful. The bleeding vessels were finally secured. None of the patients lived over thirty-six hours. In his cases, the speaker said, he made the left lateral incision, below the margin of the ribs secondary to one through the outer margin of the left rectus. He had never resorted to evisceration, and unless the bleeding could be temporarily but quickly checked on opening the abdomen, he thought it would be a serious matter to take time for evisceration in order to gain freer access to the spleen.

Dr. Brewer said the case he had reported was the second one of ruptured spleen that had come under his care during the past year. The other case was a boy who had apparently received only slight contusions of the body. He was brought to the hospital at midnight, and Dr. Brewer saw him the following morning. He was then looking pretty white, and it was decided to operate at once. The spleen, which was four or five times its normal size, was found to be ruptured. The abdominal incision was at once enlarged, the rent in the spleen was plugged with gauze in the same way as in the case already reported, and then the organ was pushed up against the diaphragm. The patient recovered from the effects of the operation, and for a number of days did perfectly well. The gauze was subsequently removed through a lumbar incision, and the stitches partly taken out. Subsequently, the

patient began to develop an irregular temperature, and finally he died. On the day before his death his blood was examined, and gave a distinct Widal reaction. It was learned afterwards that he had just passed through an attack of typhoid, and his injury had evidently brought on a typical relapse.

THE TREATMENT OF PROSTATIC HYPERTROPHY ASSOCIATED WITH STONE IN THE BLADDER BY MEANS OF LITHOLAPAXY AND BOTTINI'S OPERATION AT ONE SITTING.

DR. WILLY MEYER read a paper with the above title, for which see page 17 of July number of ANNALS OF SURGERY.